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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,454	04/27/2006	Mamoru Kawashita	TOR-107US	3433
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/577,454

Applicant(s)

KAWASHITA ET AL.

Examiner

Amy B. Vanatta

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 27 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-824)
Paper No(s)/Mail Date 042706.073106.051908
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 8, the recitation of "expansion/contraction means" for "expanding/contracting" renders the claims indefinite, since it is unclear whether this "expansion/contraction" comprises expansion and contraction, expansion or contraction, or expansion and/or contraction. Thus, the slash ("/") between the two terms renders the claim indefinite in that it is unclear whether both terms are being claimed.

Claim 1 recites "the outer peripheral surface" (lines 2-3) and "the rotation center axis" (line 5) without proper antecedent basis.

In claim 4, line 3, it is unclear to what "them" refers, in the recitation "containing them".

Similarly, in claim 6, line 3, it is unclear to what "them" refers.

In claim 8, the recitation of the expansion/contraction means being provided "outside on both sides" (line 2) renders the claim indefinite. It is unclear what the means are "outside" of, and it is unclear what structure's sides "both sides" refers to (i.e. both sides of what?).

Claims 10-13 are indefinite in that they recite the web smoothing roller of claim 1, while claim 1 is indefinite in claiming the roller, as set forth above.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita (JP 11-51041).

JP 11-51041 discloses a web smoothing roller comprising a rotary roller main body (2), a fiber structure (4) with stretchability, covering the outer peripheral surface of the roller main body, and an expansion/contraction means (5 and 11) for expanding/contracting the fiber structure in the direction of the center axis of the roller main body as claimed. The fiber structure is a cylindrical fabric (4), as in claim 2 (see Abstract). Regarding claim 8, the expansion/contraction means are on both sides in the direction of rotation center axis of the rotary roller main body, and each comprises an inclined collar (see 103 in embodiment of Fig. 6) which is rotatable around a rotating central axis as claimed (see Abstract and see Figs. 1, 2, and 6). The fiber structure and the inclined collars form an enclosure surrounding the rotary roller main body as claimed.

5. Claims 1, 2, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hannig (US 2,171,551).

Hannig discloses a web smoothing roller comprising a rotary roller main body (formed by shaft 8 and disc 7), a fiber structure (rubber cloth as disclosed on pg. 2, col. 1, lines 65-74, in particular line 72) with stretchability, covering the outer peripheral surface of the roller main body (7,8), and an expansion/contraction means (1,2) for expanding/contracting the fiber structure in the direction of the center axis of the roller main body as claimed. The fiber structure is a cylindrical fabric (rubber cloth; see pg. 2, col. 1, lines 68-69 and 72, and pg. 2, col. 2, lines 6-8), as in claim 2. Regarding claim 8, the expansion/contraction means (1,2) are on both sides in the direction of rotation center axis of the rotary roller main body, and each comprises an inclined collar (1,2) which is rotatable around a rotating central axis as claimed (see Figs. 1 and 6; pg. 1, col. 2, lines 4-39; pg. 2, col. 1, lines 8-30; and pg. 2, col. 2, lines 6-8). The fiber structure and the inclined collars form an enclosure surrounding the rotary roller main body (7,8) as claimed.

6. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hurxthal (US 2,436,719).

Hurxthal discloses a web smoothing roller comprising a rotary roller main body 1, a fiber structure 10 with stretchability, covering the outer peripheral surface of the roller main body 1, and an expansion/contraction means (11,13) for expanding/contracting the fiber structure in the direction of the center axis of the roller main body as claimed (col.

4, lines 15-58). The fiber structure is a cylindrical fabric (see col. 4, lines 41-58, and in particular col. 4, lines 53-54 disclosing the use of fiberglass, which forms a "fiber" structure as claimed), as in claims 1 and 2. The cylindrical fabric is seamless, as in claim 3. Hurxthal discloses that the cylindrical fabric may be a knitted fabric (col. 2, lines 28-30) as in claim 5.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hannig (US 2,171,551).

Hannig discloses a web smoothing roller as claimed. Hannig discloses that the elastic material forming the circumference may be springs, rubber rope, rubber strands, or a continuous piece of elastic material such as rubber cloth (pg. 2, col. 1, lines 22-24 and 62-75). The continuous piece of rubber cloth meets the limitations of claims 1 and 2 in that it is a fiber structure in the form of a cylindrical fabric, as claimed. Hannig discloses that the rubber cloth is a "continuous piece" of material, however it is not specifically disclosed that the material is seamless, as in claims 3 and 7. The material is not specifically disclosed as comprising elastic yarns, as in claims 4 and 6 and is not disclosed as a knitted fabric, as in claim 5. Seamless knit fabrics, i.e. tubular knits, are

conventional in the art, and are known to be advantageous in that no seam marking appears on the resulting product. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a tubular knit fabric as the continuous elastic cloth of Hannig, since tubular knit fabrics are conventional in the art and are known to be advantageous in that no marking is formed on the resulting product due to a seam and furthermore since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Likewise, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use elastic yarns in the continuous rubber cloth of Hannig, since Hannig specifically discloses that the continuous rubber cloth is elastic, and elastic yarns are conventionally used for producing elastic cloth, as is well known in the art.

Regarding claim 9, the coefficient of static friction between the fiber structure and the web, and the coefficient of static friction between the fiber structure and the rotary roller main body, is not disclosed by Hannig. It is within the routine skill in the art to determine the optimal parameters of the web smoothing roller based upon routine experimentation, depending upon the type of web to be processed and the desired resulting properties. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the web smoothing roller of Hannig to have coefficient of friction values within the claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the

optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

9. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Fujita (JP 11-51041) in view of Wada (JP 06-329309).

JP 11-51041 to Fujita discloses a web smoothing roller as in claim 1, however the apparatus and method as recited in claims 10-13 is not disclosed. Fujita does disclose that the roller is used in an apparatus and method for manufacturing film, and specifically the roller is used as a film conveying/carrying roller (see Abstract). JP 06-329309 discloses a similar type of web smoothing roller 100 (see Fig. 1 and paragraphs 0010-0012 of English language translation supplied by applicant in IDS filed 5/19/08). JP 06-329309 discloses that the web smoothing roller 100 is used for smoothing or stretching film in an apparatus and method as shown in Fig. 3 (see Fig. 3 of JP 06-329309 and paragraphs 0005 and 0009 of English language translation of JP 06-329309). The apparatus comprises a web feeding apparatus for continuously feeding a web (i.e. the apparatus not shown which is immediately upstream of roller 105, which feeds the web F to roller 105 in Fig. 3), a web carrying apparatus (rollers 105, 104, and 100) for carrying the web, and a web winding apparatus (130) for continuously winding the web F into roll form 102 (see Fig. 3 and paragraph 0009). A web smoothing roller 100 is provided at least at one place in the carrying apparatus, as in claim 10 (paragraph 0009 of translation). The web smoothing roller 100 is disposed such that it is kept in pressure contact with a surface of the web roll 102, as in claim 11 (see Fig. 3

and 0009). JP 06-329309 discloses using the web smoothing roller in a method comprising the steps of claim 12, including a web feeding step (i.e. feeding the web F to first roller 105; Fig. 3) a web carrying step (i.e. the carrying performed by rollers 105,104,100), and a web winding step (i.e. winding the web F onto core 130 to form roll 102). A web smoothing roller 100 is provided at least at one place in the web carrying step (see Fig. 3) as in claim 12. Thus, it is known to use a web smoothing roller as a carrying roller which is in pressure contact with a rolled web in an apparatus and method for producing a film web roll. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the web smoothing roller of Fujita (JP 11-51041) in the apparatus and method as claimed, since it is known to use a web smoothing roller as a carrying roller which is in pressure contact with a rolled web in an apparatus and method for producing a film web roll, in order to smooth the film web while it is being rolled so that the film is wound evenly and smoothly, as taught by Wada (JP 06-329309).

Regarding claim 13, both Fujita and Wada disclose that the web is a film. Although it appears that neither Fujita nor Wada disclose that the film is polyester film, it is noted that film which is processed in the claimed manner and wound into a roll form is typically made of polyester. It would have been obvious to one having ordinary skill in the art at the time the invention was made to process polyester film in the method of Fujita taken in view of Wada, since film made of polyester is typically processed and wound into roll form in the manner taught by Fujita and Wada.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amy B Vanatta/
Primary Examiner
Art Unit 3765